IN THE CLAIMS:

The following claim listing is meant to replace all previous claim listings.

1. (Previously Presented): A process for producing branched fatty acids, comprising:

a. introducing a recombinant nucleic acid coding for a cyclopropane fatty acid synthase into a plant cell, a plant tissue or a seed of a plant;

b. regenerating a transgenic plant from the plant cell, the plant tissue or the seed of the plant wherein said transgenic plant produces branched fatty acids; and

c. recovering said branched fatty acids from said transgenic plant.

2. (Previously Presented): The process according to claim 1, further comprising the step of extracting the branched fatty acids.

3 – 11. (Cancelled).

12. (Currently Amended): A recombinant nucleic acid comprising in the following order:

a. a plant expressible promoter selected from the group consisting of a nopaline synthase promoter (nos), an octopine synthase promoter (ocp), a mannopine promoter, a agropine promoter, a napine promoter and an acyl carrier protein promoter (ACP);

~~b~~

b. ~~c.~~a nucleic acid coding for a cyclopropane fatty acid synthase; and

c. ~~d~~ a 3' transcription termination sequence.

13. (Previously Presented): The nucleic acid according to Claim 12, wherein the promoter expresses the nucleic acid in a seed of a plant.

14 - 16 (Cancelled).

17. (Previously Presented): A vector comprising a recombinant nucleic acid according to Claim 12.

18. (Previously Presented): A plant cell comprising a recombinant nucleic acid according to Claim 12.

19. (Cancelled).

20. (Previously Presented): A transgenic plant comprising at least one cell according to claim 18.

21. (Currently Amended): A transgenic plant comprising ~~at least~~ in ~~one part of~~ its cells, a nucleic acid according to Claim 12.

22. (Cancelled).

23. (Currently Amended): A process for preparing branched fatty acids from a transgenic plant whose cells contain a recombinant nucleic acid according to Claim 12, comprising :
culturing said transgenic plant in a field;
recovering the seeds from said transgenic plant; and
extracting the branched fatty acids from these seeds.

24 - 29 (Cancelled).

30. (Previously Presented): The plant cell according to Claim 18, wherein said plant cell is colza, sunflower, peanut, soya, flax or maize.

31. (Currently Amended): A ~~The~~ process ~~according to Claim 1, further comprising the steps of:~~ for producing branched fatty acids, comprising:
introducing a recombinant nucleic acid coding for a cyclopropane fatty acid synthase into a plant cell;
culturing said plant cell in a medium suitable for growth; and

extracting and purifying the branched fatty acids from said plant cell or from the supernatant of said medium.

32. (Cancelled)

33. (Previously Presented): The nucleic acid according to Claim 12, wherein the plant expressible promoter is an acyl carrier protein promoter (ACP) or a napine promoter.

34. (Cancelled)

35. (Withdrawn): A process for producing branched fatty acids, comprising:

a. introducing a recombinant nucleic acid coding for a S-adenosyl-methionine that catalyzes the transfer of a methyl group to an aliphatic chain of an unsaturated fatty acid into a plant cell, a plant tissue or a seed of a plant;

a. regenerating a transgenic plant from the plant cell, the plant tissue or the seed of the plant wherein said transgenic plant produces branched fatty acids; and

b. recovering said branched fatty acids from said transgenic plant.

36. (Withdrawn): A recombinant nucleic acid comprising in the following order:

a. a plant expressible promoter that regulates the expression of a nucleic acid coding for a S-adenosyl methionine that catalyzes the transfer of a methyl group to an aliphatic chain of an unsaturated fatty acid;

b. a nucleic acid coding for said S-adenosyl methionine; and

c. a 3' transcription termination sequence.

37. (Previously Presented): A process for producing branched fatty acids, comprising:

a. introducing a recombinant nucleic acid coding for a cyclopropane fatty acid synthase into a tobacco cell, a tobacco tissue or a tobacco seed;

b. regenerating a transgenic plant from the tobacco cell, the tobacco tissue or the tobacco seed, wherein said transgenic plant produces branched fatty acids; and

c. recovering said branched fatty acids from said transgenic plant.